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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,527	09/30/2003	Jacey Robert Beaucage	HSJ920030183US2	6090

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BRACEWELL & PATTERSON, LLP  
PO BOX 61389  
HOUSTON, TX 77208-1389

EXAMINER
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ELEY, TIMOTHY V

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/675,527

Applicant(s)

BEAUCAGE ET AL.

Examiner

Timothy V Eley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-16, 18 and 19 is/are allowed.
- 6) ☒ Claim(s) 1, 2-10 and 17 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/30/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 6-8, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. "adjusting . . . order"(claim 6, lines 1-3) is vague, indefinite, and awkwardly and confusingly worded. Does the adjusting of the temperature selectively charge different areas of the lapping plate, or are different areas of the lapping plate charged while the temperature is adjusted?

b. "the abrasive slurry"(claim 8, line 2; claim 17, line 2) lacks proper antecedent basis since it was not properly earlier referred to.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1,4,8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by both Cesna et al(5,803,798) and Tanaka et al(5,718,620), each considered independently.

a. Both Cesna et al and Tanaka et al disclose a method of precisely controlling an amount of flatness of curvature of a lapping plate, comprising: providing a lapping plate and a workpiece; lapping the workpiece with the lapping plate; and controlling a temperature of the lapping plate to precisely manipulate an amount of flatness or curvature of the lapping plate. In Cesna et al, see column 2, lines 26-52; column 5, lines 40-end; and column 6, lines 1-12 and lines 53-end. In Tanaka et al, see figure 8; column 1, lines 66 and 66; column 2, lines 1-4 and lines 63-end; column 3, lines 1-10; column 3, lines 37-43; column 6, lines 13-27 and lines 45-end; column 8, lines 4-17; column 8, lines 33-end; and column 9, lines 1-15.

b. Regarding claim 8, inherently the temperature of the workpiece and the abrasive slurry are controlled along with the temperature of the lapping plate since they are in contact with the lapping plate.

c. Regarding claim 9, the plates are formed from a plurality of material which inherently have different coefficients of linear expansion as broadly recited by applicant.

*Claim Rejections - 35 USC § 103*

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over both Cesna et al and Tanaka et al.

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a. Both Cesna et al and Tanaka et al or explained above.

b. Neither Cesna et al nor Tanaka et al discloses specifically that the layers are formed from metal alloys.

c. However, the examiner takes Official Notice that it is well known in the art to manufacture lapping plates from metal alloys, and therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the layers of the lapping plates of both Cesna et al and Tanaka et al from metal alloys.

6. Claims 1,3-5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawada et al(5,365,700) in view of either Cesna et al or Tanaka et al.

a. Sawada et al discloses a method of precisely controlling a temperature of a lapping plate, comprising: providing a lapping plate and a workpiece; lapping the workpiece with the lapping plate; and controlling a temperature of the lapping, and thus giving the workpiece(magnetic slider) a high crown-to-camber ratio. See figures 21A-21C; column 4, lines 59-64; column 8, lines 67 and 68; column 9, lines 1-18; column 11, lines 4-41.

b. Sawada et al does not discloses that the temperature of the lapping plate is controlled in order to precisely manipulate an amount of flatness or curvature of the lapping plate.

c. However, both Cesna et al and Tanaka et al, as explained above disclose controlling the temperature of a lapping plate in order

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to precisely manipulate an amount of flatness or curvature of the lapping plate.

d. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Sawada et al method by controlling a temperature of the lapping plate as taught by either Cesna et al or Tanaka et al in order to precisely manipulate an amount of flatness or curvature of the lapping plate so that the magnetic slide is polished more accurately.

e. Regarding claim 8, inherently the temperature of the workpiece and the abrasive slurry are controlled along with the temperature of the lapping plate since they are in contact with the lapping plate.

***Allowable Subject Matter***

7. Claims 2 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 6 and 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. Claim 17 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

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10. Claims 12-16,18, and 19 are allowed.

**Conclusion**

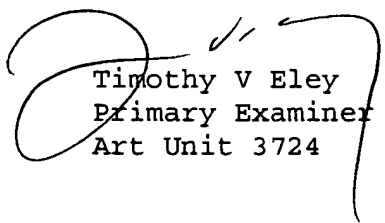
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. The cited prior art discloses lapping plates.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy V Eley whose telephone number is 571-272-4506. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Timothy V Eley  
Primary Examiner  
Art Unit 3724

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